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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,318	10/26/2001	Roberta A. Wick	J-3145	2007

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EXAMINER	
DELCOTTO, GREGORY R	
ART UNIT	**PAPER NUMBER**
1751	

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

5K

Office Action Summary	Application No.	Applicant(s)	
	10/035,318	WICK ET AL	
	Examiner	Art Unit	
	Gregory R. Del Cotto	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 November 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-8 are pending. Claims 9-16 have been cancelled. Applicant's amendments and arguments filed 11/24/03 have been entered.

Objections/Rejections Withdrawn

The following objections/rejections as set forth in the Office Action mailed 8/18/03 have been withdrawn:

The rejection of claims 1-5, 7, and 8 under 35 U.S.C. 103(a) as being unpatentable over WO 01/42415 in view of WO 99/53915 has been withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/03959 in view of WO 99/53915. (Note that, a translation of WO 99/03959 has been requested).

'959 teaches novel detergent mixtures containing ester quater, chitosan and/or chitosan derivatives, protein hydrolyzates, and optionally, alkyl and/or alkenyl oligolgycosides and/or betaine. See Abstract. Specifically, '959 teaches compositions containing 35% distearydimethylammonium chloride, 1% chitosan, 14% wheat protein hydrolysate, and the balance water. The compositions may also contain builders such as EDTA, NTA, citric acid, etc. See column 7, lines 1-10. The compositions may be used as laundry detergents, dishwashing detergents, conditioners and cosmetic preparations such as hair-care and body-care products. See column 6, lines 45-58. If the compositions are used for shampoos, consistency factors such as carboxymethyl cellulose and hydroxyethyl cellulose may be used in the compositions. See column 9, lines 35-50.

'959 does not specifically teach a cleaning composition having the specific pH containing a surfactant, furanone a poly D-glucosamine, water, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

'915 teaches the use of furanone compounds as antibacterial agents and more specifically, it has surprising been found that new synthetically produced furanone compounds have inhibitory activity against Gram positive bacterial without having corresponding deleterious activity against animal or mammalian cells previously

reported to be the case with naturally occurring furanones. See page 1, lines 1-30. The active furanones can be used as antibacterial agents for soaps, shampoos, detergents for laundry and dishes, contact lenses, household cleaning formulations, etc. See page 3, lines 4-15.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a halogenated furanone in the hard surface cleansing composition taught by '959, with a reasonable expectation of success, because '915 teaches the advangateous antibacterial properties imparted to shampoo cleansing compositions when using halogenated furanones.

It would have been obvious, at the time the invention was made, to formulate a cleaning composition having the specific pH containing a surfactant, a poly D-glucosamine, furanone, water, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because the broad teachings of '959 in combination with '915 suggest a cleaning composition having the specific pH containing a surfactant, furanone, a poly D-glucosamine, water, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Claims 1-5, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garris (US 5,776,876) in view of WO 99/53915.

Garris teaches effective, multi-use filter cleaning compositions including 5% to 60% of a strong acid, 1 to 40% of a surfactant and 0.5% to 20% of a

sequestrant/builder. The compositions optionally include 0.5% to 10% of a water soluble organic solvent, and/or 0.5% to 10% of nonionic surfactant. See Abstract. Suitable surfactants include anionic, cationic such as various quaternary ammonium chlorides, etc. See column 2, lines 30-55. Organic acids may serve as the builder and suitable acids include citric acid, lactic acid, etc. See column 2, line 60 to column 3, line 10. The compositions may also include a water-soluble polymeric agent as the builder sequestrant and such agents include chitosan, polyvinylamine, etc. Suitable organic solvents include glycol ethers, glycols, alcohols, etc. See column 3, lines 10-35. Examples contain greater than 50% water. See Example 10, 13, etc.

Garris do not specifically teach the use of furanone or a cleaning composition having the specific pH containing D-glycosamine, furanone, water, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

'915 is relied upon as set forth above.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a halogenated furanone in the hard surface cleansing composition taught by Garris, with a reasonable expectation of success, because '915 teaches the advangateous antibacterial properties imparted to hard surface cleansing compositions when using halogenated furanones.

Note that, with respect to the pH as recited by the instant claims, the Examiner asserts that the compositions as taught by Garris in combination with '915 would encompass compositions having a pH of less than 6 as recited by the instant claims

because Garris in combination with '915 suggest composition containing the same components in the same proportions as recited by the instant claims.

It would have been obvious, at the time the invention was made, to formulate a cleaning composition having the specific pH a poly D-glucosamine, furanone, water, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because the broad teaching of Garris in combination with '915 suggest a cleaning composition having the specific pH containing furanone, a poly D-glucosamine, water, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Response to Arguments

With respect to '959, Applicant states that '959 does not mention pH and that an acidic pH would not be suggested by '959 since the compositions were designed for dermatological compatibility. Additionally, Applicant states that '959 does not a separate acid additive as now recited by instant claim 1 and that there is no teaching of a residual beneficial antimicrobial activity which lasts even after the cleaning has been completed. Note that, in response to the pH and antimicrobial activity, the Examiner asserts that '959 in combination with '915 would suggest compositions having the same pH and antimicrobial activity as the compositions as recited by the instant claims because '959 in combination with '915 encompass compositions containing the same components in the same proportions as recited by the instant claims. Additionally, an acid can be added to the composition as indicated in column 7, lines 5-10.

With respect to Garris, Applicant states that the Office Action fails to address why one would be motivated to use a filter related formulation as a hard surface cleaner and that Garris does not suggest a residual antimicrobial effects. In response, note that, the Examiner maintains that a filter cleaner formulation as taught by Garris would fall within the generic category of hard surface as recited by the instant claims. Additionally, the Examiner asserts that Garris et al in combination with '915 would suggest compositions having the same antimicrobial activity as the compositions as recited by the instant claims because Garris et al in combination with '915 encompass compositions containing the same components in the same proportions as recited by the instant claims.

Furthermore, Applicant states that Garris does not teach the use of a disinfectant and that since the main purpose of Garris is to remove biguanide deposits from filters, one would be directed away from adding even more of what would be considered the class of the contaminant to a cleaner designed to remove that type of contaminant. In response, note that, the cationic surfactants such as the various quaternary ammonium chlorides taught by Garris would fall under the broad category of disinfectants as recited by the instant claims. Note that, the use of cationic surfactants also appears in Example 6. Additionally, the cationic surfactants taught by Garris et al are much different from the PHMB that is being removed; they are not polymeric materials and would not be expected to clog filter. Thus, the Examiner maintains that Garris et al provide motivation to formulate a cleaning composition as recited instant claim 7.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (703) 308-2519. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (703) 308-4708. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

GRD
February 23, 2004

GREGORY DELCOTTO
PRIMARY EXAMINER